ABSTRACT OF THE DISCLOSURE

An electronically reconfigurable artificial magnetic conductor (RAMC) includes a frequency selective surface (FSS) having an effective sheet capacitance which is variable to control resonant frequency of the RAMC. In one embodiment, the RAMC further includes a conductive backplane structure and a spacer layer separating the conductive backplane structure and the FSS. The spacer layer includes conductive vias extending between the conductive backplane structure and the FSS, and voltage variable capacitive circuit elements coupled with the FSS and responsive to bias voltages applied on one or more bias signal lines routed through the conductive backplane structure and the conductive vias.